The Honorable John C. Coughenour

UNITED STATES DISTRICT COURT

WESTERN DISTRICT OF WASHINGTON

UNITED STATES OF AMERICA, *et al.*, Plaintiffs, and PUYALLUP TRIBE OF INDIANS, *et al.*, Plaintiff-Intervenors, v. ELECTRON HYDRO, LLC, Defendant.	Case No. 2:20-cv-01746-JCC DECLARATION OF CHARISSA BUJAK IN SUPPORT OF OPPOSITION TO MOTION TO STAY DISCOVERY

DECLARATION OF CHARISSA BUJAK

1. I, Charissa Bujak, declare under penalty of perjury that the following statements are true and correct to the best of my knowledge and belief and that they are based upon my personal knowledge and information contained in the records of the United States Environmental Protection Agency ("EPA" or "the Agency"). *See* 28 U.S.C. § 1746.

2. I am a biologist and enforcement officer for the EPA Region 10 Surface Water and Enforcement Section of the Enforcement and Compliance Assistance Division, and I have been so employed since November 2, 2015. I hold a B.S. in Biology, which I obtained from Northland College

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in 2009 and an M.S. in Plant Science, which I obtained from Montana State University in 2015. For these degrees, my studies included classes such as biology, geology, ecology, chemistry, research design and analysis, and plant physiology.

3. I am also an EPA certified Clean Water Act ("CWA") inspector. As an enforcement officer and a certified CWA inspector, I ensure the protection of public health and the environment by investigating violations of CWA section 301, including unauthorized discharges of pollutants into waters of the United States and violations of permits issued under sections 402 and 404 of the CWA, 33 U.S.C. §§ 1342 and 1344.

4. This declaration is filed in support of the United States' Opposition to Defendant's Motion to Stay Discovery Pending Resolution of Criminal Proceedings. The purpose of this declaration is to describe the serious nature of Electron Hydro's CWA violations and the actual and potential environmental harm that resulted from those violations. That harm includes the potential for aquatic toxicity from the discharge of artificial turf and its component crumb rubber and the impacts associated with the unauthorized discharge of fill material that was not accounted for in approved project designs and thus may have detrimental effects to the Puyallup River channel and floodplain dynamics.

5. EPA sent an Information Request, signed on November 4, 2020, to Electron Hydro, pursuant to EPA's authority under section 308 of the CWA. EPA received Electron Hydro's responses to this Information Request and received supplemental responses between January 2021 and May 2021. As the EPA enforcement officer assigned to investigate this matter, I reviewed Electron Hydro's responses to EPA's Information Request. In reviewing Electron Hydro's response, I reviewed, among other things, Electron Hydro's application and authorizations under the U.S. Army Corps of Engineers Nationwide Permits ("NWPs") 3 and 13 and associated materials; information related to Electron Hydro's coverage under the State of Washington's Construction Stormwater General Permit, including

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self-inspections, sampling, and records of actions; information related to all discharges to waters of the United States into the Puyallup River from October 1, 2015 through November 4, 2020; information related to Electron Hydro's 2020 in-river construction work, including construction of a temporary bypass channel in the Puyallup River and Electron Hydro's placement of approximately 2,409 square yards of artificial field turf in the temporary bypass channel; information related to subsequent discharge of that artificial field turf and its component crumb rubber into the downstream portions of the Puyallup River; information related to Electron Hydro's efforts to remove discharged materials; and the results of representative sampling of the artificial field turf and rubber crumb and sediment elutriate samples completed by EcoAnalysts, Inc. on behalf of Electron Hydro. I have reviewed the documents produced by Electron Hydro in response to the United States' requests for production, as well as information obtained from the Puyallup Tribe. I have reviewed recently published scientific literature on the composition and toxicity of artificial field turf and infill materials, as well as a specific toxic chemical associated with automobile tires that may be present in crumb rubber made from tires. I also read an affidavit of probable cause filed in Pierce County Superior Court on January 10, 2022 by the State of Washington to support a criminal proceeding. The affidavit contains a narrative description of the results of chemical analyses of samples of artificial turf and crumb rubber that were recovered from the Puyallup River after the release.

Alleged Violations

6. The Electron Hydropower Project is a run-of-river hydroelectric facility located on the Puyallup River, in Pierce County, Washington at approximately river mile 41 through river mile 31 ("Facility"). The Facility includes a wooden flow diversion structure, a spillway, a water intake, and a 10-mile-long flume that conveys diverted water to a 26-megawatt powerhouse for electricity generation.

7. On March 31, 2017, Electron Hydro submitted an application to the U.S. Army Corps of Engineers, Seattle District ("Corps") for CWA section 404 permit coverage for the maintenance of its

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Facility and for bank stabilization. In its application, Electron Hydro described the proposed project and its plans for construction, including its plans to exclude fish from the work area, construct a cofferdam to isolate the flow of the river, and create a bypass channel on the right bank of the river to route flow away from the area where the diversion structure, spillway, and shoreline protection work would occur. On August 8, 2018, the Corps issued a verification letter authorizing Electron Hydro to conduct work as described in Electron Hydro's application and based on its proposal and drawings dated March 28, 2017, under Nationwide Permits 3 (Maintenance) and 13 (Bank Stabilization), subject to certain special conditions.

8. On or about July 15, 2020, Electron Hydro began in-water work in the Puyallup River as part of the proposed project. Between July 20 and July 27, 2020, Electron Hydro constructed a temporary bypass channel in the Puyallup River to divert water around the work area. Electron Hydro then installed approximately 2,409 square yards of used, artificial field turf, which consists of linear low-density polyethylene ("LLDPE") grass yarn matrix and a loose granular infill material composed of a mixture of graded silica sand and crumb rubber, into the temporary bypass channel as underlayment for a high-density polyethylene ("HDPE") liner. Placement of the used, artificial field turf in the river was not authorized by any of Electron Hydro's permits and Electron Hydro did not inform any of the relevant regulatory agencies of its decision to place the turf in the river.

9. On July 28, 2020, Electron Hydro diverted the flow of the Puyallup River into the temporary bypass channel. On the night of July 29, 2020, into July 30, 2020, the liner tore and approximately 617 square yards of used, artificial field turf, including four to six cubic yards of crumb rubber, and portions of HDPE liner discharged into the Puyallup River. Portions of the used, artificial field turf and the HDPE liner were and will likely continue to be found throughout the downstream segments of the Puyallup River. Artificial turf and infill materials were likely widely and rapidly dispersed into the Puyallup River, including into the sediment layer in the riverbed.

10. In October 2020, Electron Hydro used an excavator to construct a diversion rock spillway in the left side of the Puyallup River by discharging approximately 6,000 cubic yards of rock, gravel, and/or other fill material. Placement of the diversion rock spillway was not permitted under section 404

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and the rock, gravel, and/or other fill material used to create it remain in the river to this day.

Inspection Observations

11. On Thursday, May 6, 2021, I, along with other personnel from EPA and the U.S. Department of Justice ("DOJ"), conducted a site visit at the Facility. During the site visit, I observed some of the artificial field turf and HDPE liner that had been recovered from the Puyallup River. I observed the collection of samples of the artificial turf, HDPE liner, and other materials from one of Electron Hydro's storage locations. I also observed the degraded condition of the artificial turf, which exhibited loose, torn, and worn pieces of plastics material. I observed the crumb rubber and sand easily fall out of the turf pieces when handled.

12. During the site visit, we also visited both sides of the river at the diversion structure. There, I observed the channel, streambed, and floodplain dynamics of the Puyallup River. Specifically, I observed the channel form and velocity of the Puyallup River, the condition of the natural banks surrounding the diversion structure, and evidence of the significant bedload carried by the Puyallup River's substantial flow. I also observed the rock, gravel, and/or other fill material that Electron Hydro discharged into the river without authorization to create the diversion rock spillway.

Environmental Harm

13. The research I reviewed on the composition and toxicity of artificial field turf indicates that artificial field turf and infill materials contain chemicals that exhibit toxicity in aquatic species. Likewise, the research indicates that crumb rubber contains toxins, including a wide range of metals, such as zinc and lead, and toxic organic compounds, such as PAHs. Fish may consume crumb rubber and small pieces of artificial turf causing physical and toxicological damage. EcoAnalysts, Inc. laboratory staff that conducted representative sampling of the artificial field turf and crumb rubber on behalf of Electron Hydro observed the test organisms consuming the sample particles (plastic turf and/or rubber crumb). In addition, the State of Washington's affidavit of probable cause indicates that the University of Washington-Tacoma Center for Urban Waters performed chemical analysis on samples of the turf and crumb rubber that Electron Hydro installed in the temporary bypass and that was later recovered from the Puyallup River and stored at the Electron facility. According to the affidavit, all of the crumb rubber

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samples tested contained 6PPD-quinone, a chemical compound known to be present in tires. Probable Cause Affidavit at 8. 6PPD-quinone ". . . is among the most acutely toxic compound[s] known to exist for fish." Id. The research I reviewed indicates that 6PPD-quinone may induce acute mortality in coho salmon. Because it is unlikely that coho salmon are uniquely sensitive, it is reasonable to assume similar mortality in other aquatic species, especially other salmonids. Based on information provided by the Puyallup Tribe, I understand that the Tribe has continued to find and recover artificial field turf and associated materials in the Puyallup River, including as recently as January 2022.

14. The diversion rock spillway that Electron Hydro constructed by discharging approximately 6,000 cubic yards of rock, gravel, and/or other fill material in the left side of the Puyallup River may also cause continued harm to aquatic species and their environment. The structure was likely a significant impediment to adult Endangered Species Act ("ESA") listed salmon, steelhead, and bull trout attempting to move upstream to spawn and may have created a danger to downstream-migrating juvenile fish that could become trapped in the pools created between large rock when gravel and finer fill materials washed out during expected high flows. This unauthorized structure may continue to have additional unknown effects on the Puyallup River.

15. Civil injunctive relief is needed to address the ongoing harm from degraded artificial field turf that may remain in the river and the known and potentially unknown effects of the diversion rock spillway. To delay resolution of this matter is to delay removal of unauthorized fill and other pollutants. The longer this illegal fill material and other pollutants remain in the river, the more harm they may cause to the river and to ESA-listed fish. Significantly, the longer artificial turf and infill materials remain in and subject to the flow of the river, the more likely they may be dispersed widely thus making them more difficult, if not impossible, to locate and recover.

16. Civil injunctive relief is also needed to mitigate the environmental harms caused by pollutants that may remain in the river even after full implementation of efforts to remove them, such as crumb rubber, which is linked to aquatic toxicity, and is unlikely to ever be recovered. Delay of this case will delay these important injunctive relief measures, including restoration of river habitat, improvements to fish passage, and water quality monitoring.

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17. Finally, although the known environmental harms are serious, the full extent of the environmental harm to the Puyallup River – including to ESA-listed fish – is unknown and likely significant. Delaying that relief could further harm the Puyallup River, jeopardize ESA-listed and other important species of fish, and detrimentally affect other aquatic life.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 7, 2022, in Boise, ID.

Charissa Bujak
Enforcement Officer
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